

REMARKS

Claims 1-23 were pending and stand rejected. The Office Action indicates that claims 1-21 were rejected as obvious from *Takahashi* in view of *Wells*. Additionally, the Office Action rejects claims 22-23 based upon the two same references, and in further view of *Bock*.

The claims are now substantially amended. The independent claims are now claims 1, 13, 26, and 27. All of the amendments are fully supported by the specification, and introduce no new matter.

Applicant respectfully submits that all cited prior art documents fail to disclose a solution in which the volume or rate of a bitstream representative of an encoded video signal comprises decoding the DCT coefficients representative of an image block in the bitstream and filtering the DCT coefficients using a filter, the transfer function of which is adaptable.

Concerning the *Takahashi* reference, the primary embodiments in *Takahashi* (first and second embodiments) suggest data reduction to be achieved at the level of the actual video image information. *Takahashi* is focused on handling the whole information and therefore has not come across the idea of using a bitstream analyzer in order to separate the different kinds of data from each other. In the present invention, there is a bitstream analyzer (block 502 in Fig. 5) that separates the original video stream into as many as four different component streams, which are the untouched data component stream, the DCT coefficients component stream, the weighing matrices component stream and lastly the VBV component stream. Performing the compression-based operations in separate processing branches for these separate types for data is much more economical than driving the whole encoded video stream through only one single processing block where some corners of it are sliced, which is *Takahashi's* approach.

Takahashi notes briefly the issue of DCT coefficients but does not consider any other way of handling them than not transmitting some of them. Such an approach, a

decision to discard some DCT coefficients, is not the same as the applicant's claimed feature of using an adaptive filter to filter the DCT coefficients.

In addition, *Takahashi* does not disclose using a bitstream analyzer. However, it appears that the additional citation of *Wells* makes up this deficiency. *Wells* makes it clear that transcoding a video stream may be necessary, e.g., because of network congestion or capacity limitations (col. 3, lines 43-45), which is synonymous to saying that the task of the transcoder is to reduce the amount of data in the video stream. Additionally, *Wells* suggests using an apparatus called the "scanner" 22, which is more or less the same as applicant's term "bitstream analyzer". *Wells* suggests that the "scanner" may read virtual buffer verifier values from the incoming data (col. 8, lines 14-17). Additionally, *Wells* notes that transcoding of the independently encoded pictures and predictively encoded pictures may follow different rules (col. 9, lines 54-58; also col. 13), lines 1-4. However, *Wells* does not disclose using an adaptive filter to filter the DCT coefficients. The operations that *Wells* suggests for actually decreasing the volume or rate of a bitstream are listed in col. 6, lines 36-61 of *Wells*. These do not include using an adaptive filter to filter the DCT coefficients.

CONCLUSION

Applicants respectfully submit that the claims of the present application define patentable subject matter and are patentably distinguishable over the cited references for the reasons explained. The rejections of the non-final Official Action having been shown to be inapplicable, retraction thereof is requested, and early passage of all the pending claims to issue is earnestly solicited.

Applicant would appreciate if the Examiner would please contact Applicant's attorney by telephone, if that might help to speedily dispose of any unresolved issues pertaining to the present application.

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Respectfully submitted,



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